```
              REAL C,INT(13)
              INTEGER IN(13),GL(13,2)
              LOGICAL*1 CC(4),SER(13,8),ONE/'1'/,TWO/'2'/,XXX/'X'/
              EQUIVALENCE (CC,C)
    1         FORMAT (4A1)
    2         FORMAT (13I3)
    3         FORMAT (13I3)
    4         FORMAT ('0',8(13A1 ,2X))
   10         READ (5,1,END=100)  CC
              CALL RN1(C)
   15         READ (5,2) IN
              WRITE (6,2) IN
              DO 20 I=1,13
              INT(I)=IN(I)
   20         INT(I)=INT(I)/100.
   25         READ (5,3) (GL(I,1),I=1,13)
              WRITE(6,3) (GL(I,1),I=1,13)
              READ (5,3) (GL(I,2),I=1,13)
              WRITE(6,3) (GL(I,2),I=1,13)
              DO 95 MM=1,10
              DO 90 NN=1,8
              MNX=0
              MN1=0
              MN2=0
              DO 80 I=1,13
              L=GL(I,2)
              IF (L .EQ. 0)  GO TO 79
              R1=RN(0)
              R2=L
              J=L
              LL=GL(I,1)
              IF (LL .GE. L) GO TO 40
              LM=LL+1
              R4=LL
              R3=1./(R2+1.-R4)
              J=LL
              DO 30 K=LM,L
              R1=R1-R3
              IF(R1) 40,40,30
   30         J=J+1
   40         IF(J .EQ. 0) GO TO 79
              M=0
              DO 60 N=1,J
              R1=RN(0)-INT(I)
              IF (R1)  50,50,55
   50         M=M+1
              GO TO 60
   55         M=M-1
   60         CONTINUE
```

```
              IF (M) 72,79,71
   71         SER(I,NN)=ONE
              MN1=MN1+1
              GO TO 80
   72         SER(I,NN)=TWO
              MN2=MN2+1
              GO TO 80
   79         SER(I,NN)=XXX
              MNX=MNX+1
   80         CONTINUE
              IF (MNX .LT. 2 .OR. MNX .GT. 6) GO TO 85
              IF (MN1 .LT. 2 .OR. MN1 .GT. 6) GO TO 85
              IF (MN2 .LT. 2 .OR. MN2 .GT. 6) GO TO 85
              GO TO 90
   85         NN=NN-1
   90         CONTINUE
              WRITE (6,4) ((SER(M1,M2),M1=1,13),M2=1,8)
   95         CONTINUE
              GO TO 10
  100         STOP
              END
```

```
  TOTAL MEMORY REQUIREMENTS 000938 BYTES

COMPILER HIGHEST SEVERITY CODE WAS  0
//       EXEC LOADER(NOMAP)

LOADER HIGHEST SEVERITY WAS  0  --  EXECUTION                                  LOAD TIME    0 MIN    1 SEC

90 58 90 25 58 50 33 75 10 66 25 10 40
 0  0  0  0  0  0  0  0  0  0  0  0  0
 2  3  2  1  3  0  3  1  1  3  1  2  5

1XX21XX12X222  X2X2XX21X1X22  X112XX2X2XX22  11X21X1X2X222  121X2XX222X21  1211XXXXX1222  111X2X212XX2X  X1122X21XXX22
X2X21X2X21X22  1X12XXX2X1111  1111XXX12X122  X2X2XXX121X22  1X122X2X2XXX1  X1121X12X2121  11121X2X11XX2  1XX12XX1XX222
1X111XX22X22X  X1122X22XX1X2  X2121X2X21X2X  X1X2XX22212X1  11111X2X22X2X  X21X1XX1X1X22  X2122X2X2X121  11121XXX2XXX2
X111XX2X212XX  X1X21X112X2XX  X112XX11X2XX1  111XXX2XX12X2  X211XX2X212X2  1112XX2121XXX  11XX1XXX212X2  11X2XXX1221X2
11XXXX11X2222  121X2XX12X2X2  X2112X1221X22  XX111X22111XX  11121XXX2X2X2  12XXXX21X22X2  X11X2X21X1XX2  1X122X21XXX12
XX122X21X1X22  XX122X21X1X21  111XXX11X2122  11XX2X2X22121  121X1X2X1X1X2  1XX21X1X2122X  111X2XX1XX2X2  X1XXXX2X11122
X1X12X1121122  1X121XX1221XX  111XXXX2X2222  XX12XX2121X22  121X1XX1XXX22  1X11XX2221X22  X2121XX121X22  XX21XXX2221X2
111X1XX221221  12XX1XX1X12X1  1X222X1XX1122  12122XX2X1X22  1X121XXX21X21  2X121XXXX2X21  1X121XX2X122X  1X1X2X21X2222
X11XXXX1X2222  1X1XXX2X1X122  XX1X2X212212X  X1122XX121122  1112XXX222221  1XXX1X21XX121  1X1XXX2X22121  X11X1X122XX22
X111XX2121X22  11122XX121X22  12XXXX22X122X  1XX22XXXX1222  1X121X1XX1221  11X21X1XXX222  1112XXX2X1X22  X112XX2122XXX
90 58 90 25 58 50 33 75 10 66 25 10 40
 1  1  1  1  1  0  1  1  1  1  1  1  1
 2  3  2  1  3  0  3  1  1  3  1  2  5

1X112X112212X  11121XX12X22X  X2122X1121221  1X121X12212X2  X111XX212X22X  1X111X2122221  12122X212112X  1112XX2122221
11122X212112X  1XX21X2121222  X1X12X212X121  22121X222X111  11121X212X122  1X12XX2122221  1X121X2221221  X2121XX121222
11111XX221222  1112XX11212X2  1111XX2121222  21121X112X22X  X1112X212X22X  11122XX12X22X  11121X212122X  12X22XX12122X
1X12XX212112X  1222XX21122X1  1121XX1122221  1X122X1121122  12121X112X22X  12121XX121222  X112XX2121222  1X122X112X222
12121X212X211  1112XX2111222  1112XX2121222  12121X212X122  1211XX2122122  1112XX112X221  12121X112X222  12121XX11122X
1112XX1121222  1X121X222122X  1X122X2121122  XX121X2121212  1X121X1122222  1X111XX121222  12121XX121221  11122XX121221
12121XX121221  1112XX212X121  1X122XX121222  21X2XX212212X  X2111X12211X2  X1221X1122212  1112XX1121222  12121X212X122
12X11X2221221  11112X212X22X  11X21X2122221  1X112X1121222  1X121XX12112X  12121XX12X222  1111XX2122221  11121X212122X
X1X22X1221212  1112XX2121222  11112X212122X  1X121X2121222  1211XX2121221  1X12XX2121222  X1122X112X222  1X12XX2221121
1X121X21212X2  11121X212122X  1X122X21122X2  1211XX2221122  X212XX212X11X  1X121X212X122  1X121X2121222  1112XX211222X
90 58 90 25 58 50 33 75 10 66 25 10 40
 2  3  2  1  3  0  3  1  1  3  1  2  5
 2  3  2  1  3  0  3  1  1  3  1  2  5

X1121X1121222  11122X21212X2  X2122X21211X2  12222X21111X1  X1121X2112222  11X22X2122121  11X22X2111122  11X21X2112222
X1111X21212X2  12X21X1121222  12121X11221X2  X1122X2121221  11X11X21212X2  X2X21X1121222  11121X22212X2  11121X21212X2
```

```
X1112X22212X1  11121X21222X2  X1121X22212X2  12X21X21211X2  12121X21212X2  X1X21X2121222  X1121X1221222  X2121X1122221
X2X11X2121122  12X21X1121221  12X21X11212X1  12X21X2121221  X2121X11221X2  11111X21222X2  X1212X1121222  11X21X2121222
11X22X1121222  12X22X2121121  11X22X1121221  X1121X22211X2  X1121X2221221  12121X12211X2  12121X21211X2  X1121X1122222
X2111X1221122  X1X21X2221122  12X21X21212X2  X1121X2122221  X1X22X21212X1  11121X21122X2  11X21X21211X2  X1121X2122121
12X22X2121121  11X21X2121222  11X21X1121222  11X21X21211X2  21X12X2111222  12122X11222X1  11121X22211X2  X1121X2121222
X1122X2121221  12X21X2121221  11122X21212X1  11122X21221X2  X1121X11221X2  X1121X2121122  X2112X22112X1  X1121X2121222
11X21X2221122  11122X21212X1  X2X21X2111122  11121X22212X1  11122X21212X1  11X11X2121222  11X21X2121222  X2122X11211X2
11221X22212X1  X1X21X2121122  11121X22122X2  X1122X2211221  X1121X22212X2  11122X12222X1  12X11X2221221  X1X22X11212X1
99 99 99 99 99 99 99 99 99 99 99 99 99
 1  1  1  1  1  1  1  1  1  1  1  1  1
 1  1  1  1  1  1  1  1  1  1  1  1  1
```